

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN INQUIRY INTO KENTUCKY'S PRESENT	)	
AND FUTURE ELECTRIC NEEDS AND THE	)	ADMINISTRATIVE
ALTERNATIVES FOR MEETING THOSE NEEDS	)	CASE NO. 308

O R D E R

On October 9, 1986, the Commission issued its Order establishing this inquiry into integrated resource planning for the purpose of assuring the ratepayers of Kentucky that all alternatives for a reliable, low-cost supply of electricity were being considered by the six major electric generating utilities serving Kentucky: Big Rivers Electric Corporation; East Kentucky Power Cooperative, Inc.; Kentucky Power Company; Kentucky Utilities Company; Louisville Gas and Electric Company; and The Union Light, Heat and Power Company. The Commission stated as one of its goals the establishment of a process to review and analyze all options available for meeting the state's electricity needs on a utility-specific and a statewide basis in a less adversarial and divisive manner than has occurred in the past.

The Commission stated that it believed the most efficient manner of meeting these objectives was to implement a regulation which provided for the regular review of resource planning issues. As a result, the Commission established a task force comprised of representatives from the Commission Staff, the six electric utilities previously identified ("utilities"), rural electric

distribution cooperatives, Office of the Attorney General's Utility and Rate Intervention Division ("Attorney General"), Utility Ratecutters of Kentucky, Kentucky Industrial Utility Customers ("KIUC"), National-Southwire Aluminum Company, and the Office of Kentucky Legal Services Programs. In addition, the Commission hired a consultant, ICF Incorporated ("ICF"), to assist the Staff and task force in the development of a regulation drawing upon other states' experiences.

In January 1988, the utilities and KIUC submitted proposed regulations. Working from these two proposals and drawing from the regulations and experiences of other states, Staff and ICF drafted a proposed regulation.

After reviewing the Staff's proposed regulation and being advised of the concerns and comments of the parties, the Commission directed the Staff to revise its proposed regulation to reflect the concerns of all parties relating to the scope and nature of the proposed regulation.

Staff revised the proposed regulation and on April 28, 1989, the Commission issued its Order requesting comments on the revised regulation and its planned implementation. Comments were filed by the utilities, the Attorney General, KIUC, Jefferson County, Kentucky ("Jefferson County"), and ICF on behalf of Staff. Kentucky Power Company filed supplemental comments regarding its status as a member of an integrated multi-state utility system. A public hearing was held on July 18, 1989, where all parties filing comments presented testimony.

After consideration of the record in this case and with this Order, the Commission is adopting that proposed resource planning regulation, as modified herein, which allows for the regular review of the integrated resource plans of the utilities. The regulation is to be implemented in a manner which allows the Commission, Staff, and all parties the opportunity to monitor and assess the development of the regulation, and allows parties the time to develop data, expertise, and resources necessary for its successful implementation.

The regulation provides for biennial filings of the utilities' resource plans, a public review and comment period, the preparation of a report which views the filings from the statewide perspective, and a Staff report on each of the filings. The Commission stresses that although the report which will be emanating from these resource planning proceedings will be issued by its Staff, the Commission will be closely monitoring and observing the results of this process to ensure they are meeting the objectives outlined in its October 9, 1986 Order.

The issues raised by the parties in their comments and testimony and modifications to the regulation are discussed below.

#### POSITIONS OF THE PARTIES

##### The Utilities

The Kentucky Joint Committee, through its witness, testified that the utilities were supportive of a regulation which provided for the periodic reporting of demand and resources and an

opportunity for public input into the process.<sup>1</sup> However, the utilities are opposed to any requirements for hearings on utility resource plans, arguing that effective and meaningful planning cannot be conducted in an adversarial process.<sup>2</sup>

Further, the utilities state that inclusion of specific evaluation criteria<sup>3</sup> in the resource planning regulation, in conjunction with a hearing, will, in effect, result in a "de facto" approval of a utility's resource plan by the Commission. The result could be a finding, after a hearing, that a utility's planning methodology did not result in a "least cost" plan.<sup>4</sup>

Moreover, the utilities comment that the regulation as drafted could result in that de facto finding being incorporated into the record of other proceedings, such as rate or certificate

---

<sup>1</sup> Transcript of Evidence ("T.E."), pages 84 and 87.

<sup>2</sup> T.E., pages 85-86.

<sup>3</sup> These criteria were outlined in the draft regulation issued as an appendix to the April 28, 1989 Order and included those factors which the Commission would consider in evaluating the reasonableness of each utility's filing. These factors included such things as the inclusion of certain variables in load forecasts (e.g., population, price elasticity, electricity and fuel prices, demand-side management problems), and the consideration of certain factors in resource plans (e.g., environmental requirements, financial and rate impacts of plans, strategic considerations). Finally, the criteria assessed whether the methodology used by a utility produced "a resource acquisition plan which provides a reliable and adequate mix of resources to meet the base forecast load at the lowest possible cost." These factors were intended to establish an objective set of measures against which to judge the adequacy of each utility's plan.

<sup>4</sup> Joint Comments of the Utilities, page 10.

proceedings, and would be no different in effect from a formal disapproval by the Commission of the utility's integrated resource plan.<sup>5</sup> Accordingly, the utilities object to the requirement that the record resulting from the resource plan proceeding be incorporated into rate and certificate proceedings.

The utilities also argue that the regulation, by requiring the disclosure of planning information, ignores the realities of today's marketplace.<sup>6</sup> In a competitive environment, they further contend, the public availability of detailed information on utility plans could hamper utilities in competitive relationships. The utilities, therefore, propose that a section be added to the regulation which provides that "a utility may decline to include in its filings, or otherwise divulge information, if public availability of the information would tend to compromise the utility's competitive position."<sup>7</sup> The utilities note that this type of information would include pending negotiations, certain cost data, and purchase and sales information disclosures.<sup>8</sup>

---

<sup>5</sup> Id., page 10.

<sup>6</sup> Id., page 13.

<sup>7</sup> Id., Exhibit C, page 21.

<sup>8</sup> Id., Exhibit B, page 8.

Certain of the utilities subject to the proposed regulation are part of multi-state integrated utility systems.<sup>9</sup> The utilities contend that multi-state utility operations, as well as regional interconnection and coordination, prevent resource planning from having solely a state-specific focus.<sup>10</sup> The proposed process, the utilities state, could create planning conflicts for such integrated systems in that each company cannot have a separate plan for each of the states in which it operates. Such a process would defeat the purpose of integrated planning, and the resulting benefits to customers.<sup>11</sup>

In the hearing, a witness for Kentucky Power Company testified that, in addition to information on the individual operating companies, AEP currently files AEP system information, as part of the longer term forecast reports filed in Ohio and Virginia, recognizing the fact that the operating companies are part of the overall AEP system.<sup>12</sup> The witness indicated that AEP would be willing to file similar information with the Kentucky

---

<sup>9</sup> Kentucky Power Company is an operating company of the American Electric Power Company, Inc. ("AEP") which has subsidiaries in Virginia, Ohio, Indiana, Kentucky, Tennessee, Michigan, and West Virginia. The Union Light, Heat and Power Company is a subsidiary of Cincinnati Gas & Electric Company which operates an integrated utility system in Ohio, Kentucky, and Indiana.

<sup>10</sup> Joint Comments of the Utilities, page 2.

<sup>11</sup> Supplemental Comments on Behalf of Kentucky Power Company, page 4.

<sup>12</sup> T.E., page 147.

Commission provided the regulation was modified as suggested by the utilities and included no hearings or approval by the Commission.<sup>13</sup>

Additionally, the utilities argue that the regulation requires the filing of information which for some utilities may be impossible to produce immediately or in the long term, or which may not be useful for planning purposes. They propose that language should be included in Sections 5(3)(c) and 5(4)(c)(2) of the draft regulation issued on April 28, 1989, to provide that the required data be provided only "if available."<sup>14</sup>

Finally, the utilities argue that certain financial information required by the draft regulation in Section 5(5) is subject to Securities and Exchange Commission ("SEC") restrictions on disclosure. The types of projections, they argue, are difficult to make, and in the long term, may be misleading to investors. Further, they state, the general financial information called for is not necessary for evaluation of the integrated resource plan.<sup>15</sup> In a post-hearing memorandum filed on August 7, 1989, the utilities cite Rule 175 under the Securities Act of 1933 and Rule 3b-6 under the Securities Exchange Act of 1934. These "safe harbor" rules permit companies to make forward-looking statements in documents filed with the SEC without incurring liability under the anti-fraud provisions of the securities laws.

---

<sup>13</sup> Id., page 148.

<sup>14</sup> Id., Exhibit C, pages 6 and 11.

<sup>15</sup> Joint Comments of the Utilities, Exhibit B, page 6.

However, the utilities state these regulatory protections are not applicable to forecasts or other financial data filed or publicized elsewhere.

The Attorney General, Jefferson County, and KIUC

The Attorney General, Jefferson County,<sup>16</sup> and KIUC also made appearances at the hearing. All of these parties are in general support of the need for a resource planning regulation.

The Attorney General recommends that a phased approach, similar to that described in the Commission's April 28, 1989 Order, be adopted for developing an integrated resource planning regulation. Such a process will allow greater opportunity to monitor and assess the development of a regulation. In addition, the Attorney General comments on the development of procedures that may be used for evaluating the information each utility submits to the Commission and on the personnel commitments required if computer models are to be used in the evaluation process.<sup>17</sup>

Jefferson County asserts that a phased method of implementing an integrated resource planning regulation will give all parties the opportunity to build their expertise as the process evolves.<sup>18</sup>

---

<sup>16</sup> Nancy Hirsh of the Energy Conservation Coalition and David H. Kinloch both offered testimony on behalf of Jefferson County, Paddlewheel Alliance of Louisville, Inc., Utility Ratecutters of Kentucky, and the Kentucky Association of Independent Power Producers.

<sup>17</sup> Comments of the Attorney General, page 1.

<sup>18</sup> Comments of David H. Kinloch, page 1.



However, this approach might leave the process vulnerable to potential delays resulting from changes in the membership of the Commission, the utilities, and intervenors.<sup>19</sup> It is critical to the success of integrated resource planning that the Commission make the commitment of resources to assure the quality of results.

Jefferson County urges the Commission to allow active participation by intervenors in the development of resource plans, not just during the review of completed plans.<sup>20</sup> In order for intervenor participation to be beneficial, Jefferson County contends that provisions should be made for intervenor compensation.<sup>21</sup> Additionally, Jefferson County asserts that long-term generation planning should include a strong environmental component to ensure that utility plans will be able to meet any future environmental regulations.<sup>22</sup>

KIUC affirms that an integrated resource planning regulation will help keep Kentucky's electric rates and industry competitive and will benefit all electric customers.<sup>23</sup> In addition, statewide integrated resource planning can help avoid rate increases due to new plant costs.<sup>24</sup> KIUC, therefore, expresses its support of the

---

<sup>19</sup> Comments of Nancy Hirsh, pages 3-4.

<sup>20</sup> Id., pages 5-6 and Comments of David H. Kinloch, page 4.

<sup>21</sup> Comments of David H. Kinloch, page 2.

<sup>22</sup> Id., page 3.

<sup>23</sup> Comments of KIUC, page 4.

<sup>24</sup> Id., page 9.

draft regulation and urges the Commission to implement it as proposed, without further significant modifications.

#### Staff Comments

Staff, with its consultant ICF, also submitted comments in support of the draft regulation issued on April 28, 1989. Staff supports the regulation as offering a planning process that is more formal, more cooperative, and more integrated than currently exists.<sup>25</sup> The approach should allow a record to develop over time, describing each utility's planning objectives and processes, system requirements, and resource investment alternatives, while also permitting participants to continually expand their understanding and perspectives of conditions facing electric utilities and their customers, technical issues influencing utility resource planning, and those issues most pertinent to the resource decisions under consideration at any specific point in time.<sup>26</sup> Such a situation would allow planning decisions to be made on the basis of a more complete record, under less stringent time constraints and under less adversarial conditions. The draft regulation also provides a foundation and structure for a solid integrated resource planning process which could evolve over time, as necessary to meet its identified objective.

Staff notes that although the draft regulation is not sufficiently detailed to allow independent verification of a utility's plans, it will allow a relatively detailed review of a

---

<sup>25</sup> Comments of ICF, page 2.

<sup>26</sup> Id., pages 2-3.

utility's resource planning process and results. Further, Staff states that all utilities should be capable of complying with the filing requirements.

Finally, Staff notes that hearings in a resource planning process would emphasize the importance of the process and to provide a more formal documentation of the information, data, and methodologies provided, so that it could be drawn upon in other, related proceedings.<sup>27</sup>

#### COMMISSION DECISION

With this Order the Commission is issuing an integrated resource planning regulation which it will file with the Legislative Research Commission pursuant to KRS Chapter 13A. This regulation establishes a process for the regular review of resource planning issues in the Commonwealth of Kentucky. The regulation represents the result of a three-year participatory effort by the Commission, Commission Staff, utilities, public agencies, and other interested parties to develop a resource planning process which recognizes the concerns and constraints of all parties involved. The regulation provides a solid foundation for a forward-looking, cooperative resource planning process. The regulation provides for biennial filings by the utilities of historical and forecasted load information, demand-side program information, a resource assessment and acquisition plan, and supporting financial information. In addition, utilities must file documentation in support of their plans.

---

<sup>27</sup> T.E., pages 37-38.

The regulation provides for a review process with participation by Commission Staff and interested parties. These procedures include the opportunity for Staff and interested parties to file questions with the utility, for the utility to respond, and for parties to file comments on each utility's plan. Informal conferences between the Staff, utility, and interested parties will be held to discuss the resource plans and information exchanged to that point. The regulation requires the preparation of a report which views the filings from a statewide perspective. In addition, the regulation provides that, following the review of the filing by the Staff and interested parties, Staff will issue a report summarizing the information and the review process and offering suggestions and recommendations to the utility for subsequent filings.

The regulation issued today represents the first phase of the resource planning process as outlined by the Commission in its April 28, 1989 Order. In that Order, the Commission discussed subsequent phases that would be implemented in order to augment the resource planning process. The Commission acknowledges that, at this juncture, it lacks experience in reviewing and analyzing utilities' integrated resource plans. This experience is necessary in order to determine the need for subsequent phases and a feasible timetable in which to implement them. The Commission is averse to keeping this administrative proceeding open indefinitely in order to accommodate additional phases whose appropriateness and practicability have yet to be determined. If, in the future, the Commission decides that additional phases are

needed to augment the resource planning process, it will establish new administrative proceedings to address these matters.

The regulation issued today replaces the draft regulation's requirement for a hearing on each utility's resource plan with a provision allowing for informal conferences between the utility, Staff, and intervenors. At these conferences, all aspects of the utility's filings will be discussed. The Commission believes an informal proceeding, where parties may exchange information and ideas in a less adversarial manner, may better serve the interests of the parties and the resource planning process.

Consistent with the elimination of hearings in the regulation, the evaluation criteria by which the plans will be judged have also been eliminated. Evaluation criteria are an important and appropriate part of an integrated resource plan if there is a provision for the approval or disapproval of utility plans. These criteria would give a consistent basis upon which to judge each utility's plan. However, without an approval process, there is little need for evaluation criteria. Utilities' plans will be judged on the basis of their adequacy in meeting the filing requirements of the regulation.

The draft regulation appended to the April 30, 1988 Order, contained provisions for a Commission-issued report assessing the reasonableness of each utility's plan. Consistent with the elimination of hearings and the evaluation criteria, the regulation issued today provides that the Staff, not the Commission, issue a report summarizing a utility's filing and the

results of the review process. Further, the Staff report will contain recommendations and suggestions on the utility's filing to be addressed in its next filing.

Finally, consistent with the more informal nature of the proceedings, there will be no requirement that the record developed in the resource planning process be incorporated into rate or certificate proceedings.

A number of other suggested changes were made by the utilities in their comments. These included adding language to the regulation which would require that certain information be filed only "if available"; the provision that a utility could, at its discretion, withhold certain information considered confidential and harmful to its competitive position; and the elimination of the financial information section of the regulation. The Commission declines to incorporate these changes.

The language of the data requirements sections of the regulation will remain unchanged and problem areas will be handled on a case-by-case basis through the "Exemptions and Waivers" section of the regulation (Section 3). Under this section of the regulation, a utility may petition the Commission for exemption from or waiver of the requirements of specific provisions 90 days prior to the filing of a plan. The utility must identify the provision and justify the request through a demonstration of the costs and benefits of compliance with the requirements.

Similarly, the utilities argue that the disclosure of certain information as required by the proposed regulation would

jeopardize their competitive position. They propose the addition of a new section to the regulation which would provide that a "utility may decline to include in its filings, or otherwise divulge information, if public availability of the information would tend to compromise the utility's competitive position."<sup>28</sup> For similar reasons, the utilities propose eliminating the requirement that they file information on planned purchases.<sup>29</sup>

Commission Regulation 807 KAR 5:001, Section 7, allows any person to file a petition for confidentiality to prevent the public disclosure of information filed with the Commission. The criteria for granting such treatment include the value of the information to competitors; the ease of duplication of the information; and the extent to which the information is known outside the petitioner's business. The Commission finds that these provisions are sufficient to satisfy the utilities' concerns regarding the public disclosure of sensitive commercial information. Accordingly, such requests will be handled on a case-by-case basis.

The regulation requires that the utilities file selected financial information (i.e. the present value of revenue requirements, revenue requirements by year, and average system revenues per kilowatt-hour). In addition, utilities are requested to file any other meaningful and appropriate information. There is no requirement that utilities file projections of earnings or

---

<sup>28</sup> Joint Comments of the Utilities, Exhibit C, page 21.

<sup>29</sup> Id., page 12.

class-specific rate information. Further, the requirements of the regulation appear to be consistent with those of other jurisdictions' resource planning regulations which require the filing of similar financial information related to the resource plan.<sup>30</sup> If a utility desires further protection, the Commission suggests that a disclaimer directed to investors be attached to any projections of revenue requirements or average system revenues per kilowatt-hour. There is no change to the financial information filing requirements of the draft regulation.

Among other issues raised by parties in their comments and during the hearing is Jefferson County's argument that intervenors should be compensated for their participation in utility resource plan proceedings,<sup>31</sup> commensurate with the quality of the participation of the intervenor.<sup>32</sup>

It would be difficult for this Commission to selectively compensate intervenors, both because of the difficulty of judging the value of their participation in the process, and also because of the differences in resources available to each. Accordingly, the Commission declines to adopt this request at the current time.

The Commission recognizes that it lacks jurisdiction over the non-Kentucky subsidiaries of integrated, multi-state utilities currently operating in the state. It also recognizes the benefits

---

<sup>30</sup> Comments of ICF, Exhibit 4.

<sup>31</sup> Comments of David H. Kinloch, page 2.

<sup>32</sup> T.E., page 75.



of resource planning among integrated operating companies. The Commission concurs with the utilities' position that multi-state operations of some utilities prevent resource planning from having solely a state-specific focus.<sup>33</sup> Consequently, we are amending the draft regulation to require those companies which operate as part of integrated utility systems, or which purchase fifty percent or more of their energy needs from other companies, to file certain parallel information on those systems or companies. These supplemental filings will be made for informational purposes only. New provisions, outlined in Sections 7(6)-(9) and 8(3) of the attached regulation, address these additional requirements.

The utilities have requested a number of minor clarifications and typographical corrections to the draft regulation which are being adopted here without comment.

IT IS THEREFORE ORDERED that the integrated resource planning regulation as modified and attached to this Order as an Appendix be and hereby is approved for submission to the Legislative Research Commission pursuant to KRS Chapter 13A.

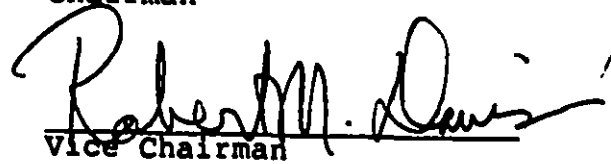
---

<sup>33</sup> Joint Comments of the Utilities, page 2.

Done at Frankfort, Kentucky, this 8th day of August, 1990.

PUBLIC SERVICE COMMISSION

  
Chairman

  
Vice Chairman

\_\_\_\_\_  
Commissioner

ATTEST:

  
Executive Director

## APPENDIX

### APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN ADMINISTRATION CASE NO. 308 DATED 8/08/90

#### PUBLIC PROTECTION AND REGULATION CABINET PUBLIC SERVICE COMMISSION

807 KAR 5:058 Integrated Resource Planning by Electric  
Utilities.

RELATES TO: KRS Chapter 278

PURSUANT TO: KRS 278.040(3), 278.310

NECESSITY AND FUNCTION: This regulation prescribes rules for regular reporting and commission review of load forecasts and resource plans of the state's electric utilities to meet future demands for electricity, assure an adequate and reliable supply of electricity at the lowest possible cost for all electric utility customers within their service areas, and satisfy all related state and federal environmental and other laws and regulations.

Section 1. General Provisions. (1) This regulation shall apply to electric utilities under commission jurisdiction except a distribution company with less than \$10,000,000 annual revenue or a distribution cooperative organized under KRS Chapter 279.

(2) Each utility shall file biennially with the commission an integrated resource plan. The plan shall include both historical and projected demand, resource and financial data, and other operating performance and system information, as well as a discussion of facts, assumptions, conclusions, and actions in the plan. Specific filing requirements are stated below.

Section 2. General Procedures for Filing and Distributing the Plan. (1) Each utility shall file its initial integrated resource plan with the commission during the year 1990 according to a schedule established by the commission. Subsequent to the initial filing, the utility shall file its integrated resource plan every two (2) years thereafter. Ten (10) copies of the plan shall be filed with the commission.

(2) Immediately upon filing of the initial integrated resource plan, each utility shall provide notice to intervenors in its most recently completed general rate case proceeding, that its plan has been filed and is available from the utility upon request.

(3) Immediately upon filing of any subsequent integrated resource plan, each utility shall provide notice to intervenors in the last integrated resource plan review proceeding, that its plan has been filed and is available from the utility upon request.

(4) Upon receipt of a utility's integrated resource plan, the commission may establish a review schedule including interrogatories, comments, informal conferences and staff reports.

Section 3. Exemptions or Waivers. A utility may file a motion requesting an exemption from or waiver of requirements of specific provisions of this regulation. Such request shall be made no later than ninety (90) days prior to filing the integrated resource plan. The commission shall rule on the request within thirty (30) days. The motion shall clearly identify the provision from which the utility is seeking exemption or waiver and provide justification for the requested relief. The justification should include an estimate of costs and benefits of compliance with the

specific provision. Notice of motion requesting an exemption shall be given in the manner provided in Sections 2(2) and (3).

Section 4. Format. (1) The integrated resource plan shall be clearly and concisely organized so that it is evident to the commission that the utility has complied with reporting requirements described in subsequent sections.

(2) Each plan filed shall identify individuals responsible for preparation of the plan. These individuals shall be available to respond to inquiries during the commission's review of the plan.

(3) Utilities may make joint filings for all or part of the requirements of this regulation. However, the information shall be stated separately for each utility as well as aggregated for joint filing, since the commission will review forecasts and plans for each electric utility individually.

(4) The commission may develop forms and formats for submission of information required under this regulation. Such forms and formats shall be forwarded to utilities in sufficient time prior to filing. The commission will periodically review the adequacy and appropriateness of forms and modify them as deemed appropriate. When forms or formats are specified, the utility shall use them in preparing its plan.

Section 5. Plan Summary. The plan shall contain a summary which discusses the utility's outlook for load growth and the resources planned to meet that growth. The summary shall include at a minimum:

(1) Description of the utility, its customers, service territory, current facilities, and planning objectives;

(2) Description of models, methods, data and key assumptions used in developing the results contained in the plan;

(3) Summary of forecasts of energy and peak demand, and key economic and demographic assumptions or projections underlying these forecasts;

(4) Summary of the utility's planned resource acquisitions including, but not limited to: improvements in operating efficiency of existing facilities, demand-side programs, non-utility sources of generation, new power plants, transmission improvements, bulk power purchases and sales, and interchanges with other utilities;

(5) Steps being taken during the next two (2) years to implement the plan;

(6) Discussion of key issues or uncertainties that could affect successful implementation of the plan.

Section 6. Significant Changes. Any integrated resource plan, subsequent to the initial plan, shall have a summary of significant changes from the last plan. This summary shall describe, in narrative and tabular form, changes in load forecasts, resource plan, assumptions or methodologies from the previous plan. Where appropriate, the utility may also use graphical displays to illustrate changes.

Section 7. Load Forecasts. The plan shall include historical and forecasted information regarding loads.

(1) The information shall be provided for the system total and, where available, disaggregated by the following customer classes:

- (a) Residential heating;
- (b) Residential non-heating;
- (c) Total residential (total of (a) and (b));
- (d) Commercial;
- (e) Industrial;
- (f) Sales for resale;
- (g) Utility use and other.

The utility shall also provide data at any greater level of disaggregation available.

(2) The utility shall provide historical information for the base year, which is the most recent calendar year for which actual energy sales and system peak demand data are available, and the four (4) years preceding the base year.

(3) The following historical information shall be provided:

(a) Average annual number of customers by class as defined in Section 7(1) above;

(b) Recorded and weather-normalized annual energy sales and generation for the system, and sales disaggregated by class as defined in Section 7(1) above;

(c) Recorded and weather-normalized coincident peak demand in summer and winter for the system;

(d) Total energy sales and coincident peak demand to retail and wholesale customers for which the utility has firm, contractual commitments;

(e) Total energy sales and coincident peak demand to retail and wholesale customers for which service is provided under an

interruptible or curtailable contract or tariff or under some other non-firm basis;

(f) Annual energy losses and estimated losses at time of summer and winter system peak demands for the system;

(g) Identification and description of existing demand-side programs and an estimate of the impact of existing demand-side programs on utility sales and coincident peak demands including, but not limited to, utility and/or government sponsored conservation and load management programs;

(h) Any other data or exhibits, such as load duration curves or average energy usage per customer, which illustrate historical changes in load or load characteristics.

(4) The utility shall provide load forecast information for each of the fifteen (15) years succeeding the base year. For purposes of this section, a base load forecast shall be required. The base forecast is the forecast considered most likely to occur. To the extent available, the utility also shall file information for alternate forecasts representing lower and upper boundaries for the range of expected future growth of the load on the utility's system.

Forecasts shall not include load impacts of additional, future demand-side programs and customer generation included as part of planned resource acquisitions reported in Section 8 below. Contributions of these programs and facilities to satisfy future customer demands for electricity shall be estimated separately and reported in Section 8(4). Forecasts shall include the utility's



estimates of existing and continuing demand-side programs as described in Section 7(5).

(5) The following information shall be filed for each forecast:

(a) Annual energy sales and generation for the system and sales disaggregated by class as defined in Section 7(1) above;

(b) Summer and winter coincident peak demand for the system;

(c) If available for the first two (2) years of the forecast, monthly forecasts of energy sales and generation for the system and disaggregated by class as defined in Section 7(1) above and system peak demand;

(d) The impact of existing and continuing demand-side programs on both energy sales and system peak demands, including but not limited to, utility and government sponsored conservation and load management programs;

(e) Any other data or exhibits which illustrate projected changes in load or load characteristics.

(6) For a utility which is part of a multi-state integrated utility system, the additional following historical data shall be provided:

(a) Recorded and weather normalized annual energy sales and generation for the integrated system; and

(b) Recorded and weather normalized coincident peak demand in summer and winter for the integrated system.

(7) For a utility which is part of a multi-state integrated utility system, the additional following forecast information shall be provided:

(a) Annual energy sales and generation for the integrated system; and

(b) Summer and winter coincident peak demand for the integrated system.

(8) For a utility which purchases 50 percent or more of its energy needs from another company, the additional following historical data shall be provided:

(a) Recorded and weather normalized annual energy sales and generation of the company supplying energy needs; and

(b) Recorded and weather normalized coincident peak demand in summer and winter of the company supplying energy needs.

(9) For a utility which purchases 50 percent or more of its energy needs from another company, the additional following forecast information shall be provided:

(a) Annual energy sales and generation of the utility supplying energy needs; and

(b) Summer and winter coincident peak demand of the utility supplying energy needs.

(10) A utility shall file all updates of load forecasts with the commission when they are adopted by the utility.

(11) The plan shall include description and discussion of methods, models, data, assumptions and judgments used in preparing load forecasts. Documentation should be explicit, detailed, and complete. Detailed technical discussions, descriptions, and supporting documentation shall be contained in a technical appendix.

The description and discussion shall include, but not be limited to:

(a) All data sets used in producing the forecasts;

(b) Key assumptions and judgments used in producing forecasts and determining reasonableness of forecasts;

(c) General methodological approach taken to load forecasting (e.g., econometric or structural), and the model design, model specification, and estimation of key model parameters (e.g., price elasticities of demand or average energy usage per type of appliance);

(d) Utility's treatment and assessment of load forecast uncertainty;

(e) Extent to which the utility's load forecasting methods and models explicitly address and incorporate the following factors:

1. Changes in prices of electricity and prices of competing fuels;

2. Changes in population and economic conditions in the utility's service territory and general region;

3. Development and potential market penetration of new appliances and other equipment and technologies that use electricity or competing fuels; and

4. Continuation of existing company and government sponsored conservation and load management or other demand-side programs.

(f) Research and development efforts underway or planned to improve performance, efficiency or capabilities of the utility's load forecasting methods; and

(g) Description of and schedule for efforts underway or planned to develop end-use load and market data for analyzing demand-side resource options including, but not limited to, load research and market research studies, customer appliance saturation studies, and conservation and load management program pilot or demonstration projects.

Section 8. Resource Assessment and Acquisition Plan. (1) The plan shall include the utility's resource assessment and acquisition plan. This plan shall provide for an adequate and reliable supply of electricity to meet forecasted electricity requirements at the lowest possible cost. The plan shall consider the potential impacts of selected, key uncertainties and shall include assessment of potentially cost-effective resource options available to the utility.

(2) The utility shall describe and discuss all options considered for inclusion in the resource assessment and acquisition plan including, but not limited to:

(a) Improvements to and more efficient utilization of existing utility generation, transmission and distribution facilities;

(b) Conservation and load management or other demand-side programs beyond those already in place;

(c) Expansion of generating facilities, including assessment of economic opportunities for coordination with other utilities in constructing and operating new units; and

(d) Assessment of non-utility generation, including generating capacity provided by cogeneration, technologies relying on renewable resources, and other non-utility sources.

(3) The following information regarding the utility's existing and planned resources shall be provided. A utility which operates as part of a multi-state integrated system shall submit the following information for its operations within Kentucky and for the multi-state utility system of which it is a part. A utility which purchases 50 percent or more of its energy needs from another company shall submit the following information for its operations within Kentucky and for the company from which it purchases its energy needs.

(a) Map of existing and planned generating facilities and transmission facilities with a voltage rating of 69 kilovolts or greater, indicating their type and capacity. This map shall also indicate locations and capacities of all interconnections with other utilities. In addition, the utility shall provide discussion of any known, significant limiting conditions which restrict transfer capabilities with other utilities.

(b) List of all existing and planned electric generating facilities which the utility plans to have in service in the base year or during any of the 15 years of the forecast period. The utility shall provide a schedule including the following information for each existing and planned facility:

1. Plant name;
2. Unit number(s);
3. Existing or proposed location;
4. Status (existing, planned, under construction, etc.);
5. Actual or projected commercial operation date;
6. Type of facility;

7. Net dependable capability, summer and winter;
8. Entitlement if jointly owned or unit purchase;
9. Primary and secondary fuel types, by unit and as applicable;
10. Fuel storage capacity; and
11. Scheduled upgrades, deratings and retirement dates.

(c) For each generating unit planned to be available during the base year or during any of the 15 years of the forecast period, the utility shall provide the following actual and projected cost and operating information for the base year (for existing units) or first full year of operations (for new units) and the basis for projecting the information to each of the 15 forecast years (e.g., cost escalation rates). All cost data shall be expressed in nominal and real base year dollars.

1. Capacity and availability factors;
2. Anticipated annual average heat rate;
3. Costs of fuel(s) per millions of British thermal units (MMBtu);
4. Estimate of capital costs for planned units (total and per kilowatt of rated capacity);
5. Variable and fixed operating and maintenance costs;
6. Capital and operating and maintenance cost escalation factors;
7. Projected average variable and total electricity production costs (in cents per kilowatt-hour).

(d) Description of transactions for purchases, sales or exchanges of electricity which currently exist or which the

utility expects to enter into with other utilities during the base year or during any of the 15 forecast years of the plan.

(e) Description of existing and projected amounts of electric energy and generating capacity from cogeneration, self-generation, technologies relying on renewable resources, and other non-utility sources available for purchase by the utility during the base year or during any of the 15 forecast years of the plan.

(f) Information on existing and new conservation and load management or other demand-side programs included in the plan. For each program the utility shall identify:

1. Targeted classes and/or end-uses;
2. Expected life of the program;
3. Projected energy changes by season, and summer and winter peak demand changes;
4. Projected cost of each program, including any incentive payments and program administrative costs; and
5. Projected cost savings of each program including savings in utility's generation, transmission and distribution costs.

(4) The utility shall describe and discuss its resource assessment and acquisition plan. The plan shall consist of resource options which produce adequate and reliable means to meet annual and seasonal peak demands and total energy requirements required by the base load forecast at the lowest possible cost.

(a) The utility shall provide the following information on total resource capacity available at the winter and summer peak, for the base year and for each year covered by the base forecast:

1. Forecast peak load;
2. Capacity from existing resources before consideration of retirements;
3. Capacity from planned utility-owned generating plant capacity additions;
4. Capacity available from firm purchases from other utilities;
5. Capacity available from firm purchases from non-utility sources of generation;
6. Reductions or increases in peak demand from new conservation and load management or other demand-side programs proposed in the plan;
7. Committed capacity sales to wholesale customers coincident with peak;
8. Planned retirements;
9. Reserve requirements;
10. Capacity excess or deficit;
11. Capacity or reserve margin.

(b) The utility shall provide the following information on planned annual generation for the base year and for each year covered by the forecast:

1. Total forecast firm energy requirements;
2. Energy from existing and planned utility generating resources disaggregated by primary fuel type;
3. Energy from firm purchases from other utilities;
4. Energy from firm purchases from non-utility sources of generation; and



5. Reductions or increases in energy from new conservation and load management or other demand-side programs proposed in the plan;

(c) For each of the 15 years covered by the plan, the utility shall provide estimates of total energy input in primary fuels by fuel type and total generation by primary fuel type required to meet load. Primary fuels shall be organized by standard categories (coal, gas, etc.) and quantified on the basis of physical units (e.g., barrels or tons) as well as in MMBtu.

(5) The resource assessment and acquisition plan shall include a description and discussion of methods, models, data, assumptions and judgments used in preparing the resource assessment and acquisition plan. Detailed technical discussion, descriptions and supporting documentation shall be contained in a technical appendix.

Description and discussion shall include, but not be limited to:

(a) General methodological approach, models, data sets and information used by the company;

(b) Key assumptions and judgments used in the assessment and how uncertainty in those assumptions and judgments were incorporated into analyses;

(c) Criteria (e.g., present value of revenue requirements, capital requirements, environmental impacts, flexibility, diversity) used to screen each resource alternative, and criteria used to select the final mix of resources presented in the acquisition plan;

(d) Criteria used in determining the appropriate level of reliability and the required reserve or capacity margin, and discussion of how these determinations have influenced selection of options; and

(e) Existing and projected research efforts and programs which are directed at developing data for future assessments and refinements of analyses.

Section 9. Financial Information. The integrated resource plan shall, at a minimum, include and discuss the following financial information:

- (1) Present (base year) value of revenue requirements stated in dollar terms;
- (2) Discount rate used in present value calculations;
- (3) Nominal and real revenue requirements by year; and
- (4) Average system rates (revenues per kilowatt hour) by year.

Section 10. Report from the Statewide Perspective. (1) Upon receipt of all integrated resource plans for each filing year, the commission shall order preparation, either by commission staff or by a consultant, of a report which views the filings from the statewide perspective.

(2) The report shall compile and aggregate key information from the utility specific filings.

(3) The report shall be completed and distributed to all parties of record in each integrated resource planning proceeding within 90 days of the date when all of the integrated resource plans have been filed.

Section 11. Notice. Each utility which files an integrated resource plan shall publish, in a form prescribed by the commission, notice of its filing in the newspaper of largest circulation in each county in which the utility currently provides service or anticipates to provide service during the period covered by the report. The notice shall be published not more than thirty (30) days after the filing date of the report.

Section 12. Procedures for Review of the Integrated Resource Plan. (1) Upon receipt of a utility's integrated resource plan, the commission shall develop a procedural schedule which allows for submission of written interrogatories to the utility by staff and interested parties, written comments by staff and interested parties and responses to interrogatories and comments by the utility.

(2) The commission may convene a conference following interrogatories and comments to discuss the filed plan and all other matters relative to review of the plan.

(3) Based upon its review of a utility's plan and all related information, the commission staff shall issue a report summarizing its review and offering suggestions and recommendations to the utility for subsequent filings.

(4) A utility shall respond to the staff's comments and recommendations in its next integrated resource plan filing.